

South Dakota State University

Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange

SDSU Extension Fact Sheets

SDSU Extension

1968

Insects and Mites That Damage Soybeans

B. H. Kantack

Wayne L. Berndt

Follow this and additional works at: https://openprairie.sdstate.edu/extension_fact

Recommended Citation

Kantack, B. H. and Berndt, Wayne L., "Insects and Mites That Damage Soybeans" (1968). *SDSU Extension Fact Sheets*. 1417.

https://openprairie.sdstate.edu/extension_fact/1417

This Fact Sheet is brought to you for free and open access by the SDSU Extension at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in SDSU Extension Fact Sheets by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



For current policies and practices, contact SDSU Extension

Website: extension.sdstate.edu

Phone: 605-688-4792

Email: sdsu.extension@sdstate.edu

SDSU Extension is an equal opportunity provider and employer in accordance with the nondiscrimination policies of South Dakota State University, the South Dakota Board of Regents and the United States Department of Agriculture.

COMMON SOYBEAN INSECTS

For safe and effective use of insecticides, always identify the problem correctly.



1. Bean leaf beetle



5. Green stink bug and damaged seeds



12. Green cloverworm



2. Mexican bean beetle and larva



6. Two-spotted mite (not an insect)



7. Thrips (greatly enlarged)



3. Japanese beetle



8. Grape colaspis larva



9. Seed maggot



4. Striped blister beetle



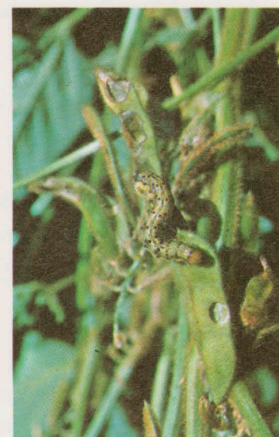
10. White grub



11. Grasshopper



14. Garden webworm



15. Corn earworm

INSECTS AND MITES THAT DAMAGE SOYBEANS BY

B. H. Kantack, Extension Entomologist
Wayne L. Berndt, Extension Pesticide Specialist

1. Bean leaf beetle, Cerotoma trifurcata (Forster). This insect is of little or no economic importance on soybeans in South Dakota at present. Adult beetles feed on soybean seedlings and damage leaves and pods. Larvae feed on roots and stems below soil surface; adult beetles measure one-fifth inch in length.
2. Mexican bean beetle, Epilachna varivestis Mulsant. Although this insect is primarily a garden pest of beans, both larvae and adults attack soybeans. Adults feed on leaves and pods; the larvae eat away the leaf surface. Adult beetles measure about one-fourth inch. All stages are usually found on the underside of the leaves.
3. Japanese beetles, Popillia japonica Newman. This insect is not known to occur in South Dakota. Although, it usually lives in turf as larvae or grubs, where it is established, emerging adult beetles feed on soybean plants.
4. Striped blister beetle, Epicauta vittata (Fabricius). This is one of several species of black, gray and striped blister beetles that attack soybeans. These insects range in size from one-half to three-fourths inch in length. When they become numerous they cause considerable leaf injury. Often they appear in fields suddenly in spotted areas leaving stripped plants.
5. Green stink bug, Family Pentatomidae. Several different species of stink bugs feed on soybeans. Damage is caused by both nymphs and adults sucking sap from the bean pods. This injury reduces quality of the beans and if beans are small when attacked they do not develop. Stink bug injury is of little importance in soybean production in South Dakota.
6. Two spotted spider mite, Tetranychus urticae (Koch). Spider mites are very small and can best be observed with a magnifying glass. Feeding on the undersides of the leaves will cause the foliage to take on a yellow or bronze color. Mites, eggs and fine webbing can be seen on close examination of infested plants. Injury occurs often during hot, dry periods in July and August.
7. Thrips, order Thysanoptera. Thrips are very small insects that feed by rasping open the leaf surface; they feed on the plant juices that ooze from the wounds. This injury often causes foliage discoloration with yellowing and withering of the foliage. Thrips can stunt young plants early in the season. Severe thrip injury on soybeans occurs infrequently in South Dakota.
8. Grape colaspis, Colaspis flava (Say). The larvae are small grubs up to one-sixth inch in length, living in the soil feeding on roots. Beans following clover crops may suffer damage early in the season. Adults feed on soybean foliage.
9. Seed maggot, Family Anthomyiidae. Larvae of the seed corn maggot and other dipterous larvae attack soybean seeds before and during germination as well as the young seedlings emerging from the soil. Damage is usually more severe when germination is delayed by cool wet weather. Maggot populations are highest in fields containing large amounts of decaying organic matter.
10. White grubs, Phyllophaga spp. Larvae of the June beetles called whit grubs feed on plant roots. There are a number of species with some of the more common species having a three year life cycle. Damage by these insects is most common on fields following sod or grass crops.
11. Grasshoppers, Family Acrididae. Grasshoppers move into field borders and often times over the entire soybean field in South Dakota. Being general feeders they often inflict severe injury to soybean foliage.
12. Green cloverworm, Plathypena scabra (Fabricius). Green cloverworms consume soybean foliage and blossoms. On first hatching the worms are yellowish green in color as the larvae mature they become darker green with fine white lines running over the length of the body. When mature the insect is about one inch in length. Feeding is done on the underside of the plant leaves. Larvae usually drop to the ground when distributed and crawl with a looping motion.
13. Cabbage looper, Trichoplusia ni (Hubner). This insect is not considered a serious pest of soybeans in South Dakota but at times feeds on soybean foliage. The green larval body is tapered towards the head. The larvae crawl in a looping motion.
14. Garden webworms, Loxostege similalis (Guenee). Infested fields will show light webs over the leaves, under which will be found greenish to yellowish-green worms; full grown worms are about one inch in length. Infested fields will show considerable webbing with the leaves inside the webs eaten off.
15. Corn earworm, Heliothis zea (Boddie). Corn earworm when full grown may reach a length of up to one and one-half inches. The larvae vary in color and markings. Corn earworms feed at times on both foliage and pods with pod injury most common.

For further information on control of these pests consult your local County Extension office or the Extension Entomologist, South Dakota State University, Brookings, South Dakota 57006.